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PUERPERAL INFECTION IN NEW YORK CITY. WHO IS RESPONSIBLE? CAN IT BE PREVENTED?*

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Ten years ago Dr. T. Gaillard Thomas,† in a masterly paper read before the New York Academy of Medicine on "The Prevention and Treatment of Puerperal Fever," sounded a loud note of warning against allowing the poison of puerperal septicæmia to come in contact with the genitalia of the parturient, from either the surroundings of the patient, the hands of the nurse or the physician himself. Dr. Garrigues,‡ the same year, in a paper read before the County Medical Society on "Prevention of Puerperal Infection," gave the profession in minute detail the methods adopted by himself, both in private and maternity practice, to prevent the introduction of septic germs into the genital tract after labor.

The profession seems to have heeded the warning and, in some degree, to have followed the antiseptic methods then emphasized and, as a result, we find to-day a great diminution in the death record of puerperal infection in New York. Thus in 1883, with a population of 1,322,880, a birth record of 31,319, we find there occurred 254 deaths from puerperal fever, so called, and 28 deaths from miscarriage and abortion; while in 1893, with an estimated increase in population of nearly half a million, a total of 51,516 births, we have only 237 deaths from puerperal infection and 39 from miscarriage and abortion. I have classed with the deaths from puerperal infection those caused by miscarriage and abortion, for I believe that

* Read before the New York Obstetrical Society, February 6, 1894.

† T. Gaillard Thomas, *Am. Jour. of Obst.*, 1884, vol. xvii, p. 278.

‡ Dr. Garrigues, *Am. Jour. of Obst.*, 1884, vol. xvii, p. 414.

more than half the women who die from these two causes die from septic infection. In order to prove this point, I have examined each certificate of death in the thirty-one cases from abortion and miscarriage that occurred in 1892 and have found that in nineteen out of the thirty-one the cause of death was stated to be either from septicæmia, puerperal peritonitis, acute metritis, pyosalpinx and sepsis or septic peritonitis. I was unable to obtain the record for 1893 but believe the same proportion of septic cases existed.

In comparing the present death rate from puerperal infection with that occurring in the past, we must remember that, whereas ten years ago the lying-in hospitals and maternities helped swell the number of fatal cases, now, thanks to the almost perfect methods of antisepsis employed in these institutions in this city, their record, as far as deaths from puerperal infection is concerned, is a nearly clean one.

But we must consider not only the deaths that occur from puerperal infection but the number of septic cases of more or less severe type that recover, some after many months of illness and great suffering. It would be impossible to determine with any degree of accuracy the number of such cases.

Our dispensary and hospital case-books record the complications resulting from a bad "getting-up," and how often does the entry "fever" after the first confinement head the list as the cause of present sterility, chronic pyosalpinx, misplaced uteri, old adhesions and general invalidism? Who is responsible for these cases which must number thousands and which could nearly all be prevented by careful attention to the simple rules of cleanliness during and after labor? How often do we still hear the terms "milk fever," "malaria," "sewer-gas poisoning," etc., used by physicians who have charge of the parturient, when the cases are septic and infection alone is the cause of all these symptoms! One case of septic infection after confinement recently seen by me will illustrate the careless manner in which some physicians conduct the after-treatment of their cases of labor. The patient was a primipara and quite an extensive laceration of the perinæum occurred, which was repaired at the time by the physician who seems to have taken all necessary precautions against infection. On the fourth day, however, fever developed; no examination was made but the attendant was told to syringe with bichloride solution. The discharge became very foul and the patient had several chills which were followed by fever and profuse perspiration; the physician gave large doses of quinine and still neglected to seek any local cause for these symptoms.

At the end of the second week when I saw the patient, she presented that pallor so characteristic of septic poisoning, a fœtid discharge came from the uterus, the labia and thighs were excoriated and intense pruritis prevented sleep. The uterus was large, tender on pressure, abdomen distended and tympanitic. A thorough curetting, irrigation with bichloride one to five thousand and iodoform-gauze drain caused a marked improvement in the patient's condition ; subsequent irrigation with boiled water, and renewed packing, removed all dangerous symptoms, and she made a slow and full recovery but with total loss of breast milk.

Several severe septic cases have come to my knowledge in the past three years where septic infection was not conveyed to the lying-in woman by a physician but by a neighbor, nurse or midwife, and it is to these three classes of attendants that we must attribute, in a great measure, the prevalence of puerperal infection existing to-day in this city. Untrained nurses, and more frequently midwives, are a great source of danger to the women whom they confine.

Of the latter class, there are about three thousand who are registered at the Health Board of our city but have no license to practice, and probably many more who practice midwifery without even being registered. These women take entire charge of uncomplicated cases of labor and, for a small fee, do everything they deem necessary for the comfort and safety of their patients.

That the number of confinements conducted throughout by midwives is large is proved by the report of a committee * appointed by the County Medical Society last year to draft an amendment to the medical laws of this State relating to the practice of obstetrics by midwives. This committee stated that the number of births reported in New York city by midwives is within a few hundred of those reported by physicians, that number being about 25,000.

Dr. Kortright,† of Brooklyn, at a meeting of the State Medical Society held last year, reported that the midwives send in about 45 per cent. of all the births occurring in Brooklyn and probably attend one third of all the cases of labor.

Thus, the midwife is placed in a position of trust and responsibility equal to that of the experienced physician and has free scope to exercise her calling without even a license and, in the majority of cases, without adequate knowledge of practical obstetrics and the

* *Medical Record*, December 9, 1893, p. 767.

† *New York Journal of Gynæcology and Obstetrics*, vol. iii, p. 197.

methods of modern antisepsis. To prove these statements I wrote to a number of obstetricians and gynæcologists, requesting answers to the following questions:

1. How many cases of puerperal infection have you been called to attend as consultant during 1893?

2. How many of these cases were originally attended by midwives?

3. Did any of these cases terminate fatally?

The answers received were very suggestive and at the same time startling. One physician had seen in consultation 51 cases of puerperal infection in 1893 and stated that three fourths of them had been attended by midwives. Another had seen eight cases, five of them had been originally under the care of midwives. I quote from a third physician who writes: "I have seen about 30 septic cases and estimate that 25 were attended by midwives." Still another had seen "fully 25 cases of puerperal infection."

But not to weary you with the details of each answer I will give the summary of all as follows:

Answers received from physicians	16
Total number of cases seen	180
" " attended by midwives	79
" " terminating fatally	36
" " of cases of infection following miscarriage and abortion	17

(Four of these last were under the care of midwives.) To which list I have added three of my own cases; one already narrated as occurring in the practice of a physician, one where a midwife was responsible for the infection and the third which came under my own care, owing to the absence of the family physician, was directly traceable to infection from a case of puerperal septicæmia that occurred in the next house, where a member of the same family had died three days before my own patient was confined. I will relate the case briefly. I only learned the following facts when the patient, a primipara, was in actual labor. She had been with her sister-in-law during her confinement a week previously and was not transferred to the next house until, what afterward proved, too late to escape the puerperal infection. All precautions were employed by me to prevent infection but fever developed twelve hours after delivery, the wound that occurred in the perinæum at the time of labor did not unite, the edges of the tear became quickly covered with a diphtheritic-looking membrane and the inguinal glands on the left side were infected through the lymphatics and were subsequently incised and

drained. The uterus and peritonæum were not infected. This patient recovered very slowly and is now well.

Dr. Murray, in a valuable paper presented at a recent meeting of the County Medical Society, detailed two cases of puerperal infection seen by him in consultation where the source of the infection was directly traced to the nurses who had been obtained by the family and had not been recommended by the physician. Both of these nurses had come from cases of acute puerperal septicæmia and had made repeated examinations before sending for the physician.

My last proposition, viz., Can puerperal infection be prevented? is, I am aware, a most difficult one to deal with. If the question simply referred to maternities and lying-in asylums, I should unhesitatingly answer Yes; but, unfortunately, a large proportion of child-bearing women will still continue to come under the care of midwives, nurses and untrained physicians. And the question arises: What can be done to limit and regulate the first class and to educate the second? Personally, I am in favor of licensing and training (as is done in Germany) the midwives of this city. We are far behind European countries in this respect and have only recently taken any steps to control and define a midwife's duties and privileges. To this end a bill entitled "An Act to regulate the Practice of Midwifery in the State of New York" is to be presented to the Senate and Assembly this winter, and if the act becomes a law it will do much to correct some abuses that have hitherto existed.

But I do not think regulating and licensing midwives is all that is required. They should be taught, at least, the elementary branches of midwifery and have practical instruction in modern antiseptic methods at clinics or midwifery schools; in this way, and in this alone, can we train a class of midwives who will be competent to take charge of uncomplicated labor cases.

Such schools for the education of midwives are already established in Russia and Germany,* and the laws of these countries are very strict in defining their duties and in controlling their practice.

Can not this society inaugurate similar training schools in this city and help to accomplish the much-needed reform and further the solution of the problem How to prevent puerperal infection?

There is also a duty and a privilege that skilled obstetricians and gynæcologists owe to the community and their professional brethren when called as consultants in septic and non-septic cases of labor and

* *New York Journal of Gynæcology and Obstetrics*, vol. iii p. 200.

miscarriage, viz., to instruct and advise the physicians with whom they are brought in contact how to conduct their labor cases in a safe and antiseptic manner.

If the facts I have here set forth shall reawaken our vigilance and urge us to use every effort to combat the prevalence of puerperal infection, I shall feel that my labor has not been in vain.